

## CLAIMS

1           1. In a wideband mobile radio telecommunications system having heterogeneous services  
2 with different rates, a method of resource allocation comprising the steps of determining the  
3 current proportions of each rate traffic in a telecommunications cell; and applying a threshold to  
4 the loading level in said cell in accordance with the determined proportions.

1           2. A method according to Claim 1 in which the proportion of high rate users is  
2 determined from a received signal strength indication for the cell.

1           3. A method according to Claim 2 in which the determining step is performed in a base  
2 transceiver station which controls the cell.

1           4. A method according to Claim 3 in which said base transceiver station sends to a  
2 central radio network controller the determined current proportions.

1           5. A method according to Claim 4 in which said applied threshold is variable.

1           6. A method according to Claim 5 in which said variable threshold is allocated to each  
2 cell by the radio network controller.

1           7. A method according to Claim 6 in which the radio network controller maintains a table  
2 of threshold values for specific mixes of services and selects a threshold for a cell so as to  
3 maintain optimum network operation

1           8. A wideband mobile radio telecommunications system comprising a core network, and  
2 a plurality of radio network controllers each controlling a plurality of base transceiver stations;  
3 wherein each base transceiver station is arranged to determine intermittently the proportions of  
4 each rate traffic in a cell controlled by the base transceiver station; and each base transceiver  
5 station is arranged to apply a variable threshold to the loading level in the cell.

1           9. A system according to Claim 8 in which each base transceiver station is arranged to  
2 send to the radio network controller which controls it, a signal indicating the proportions and to  
3 receive from the radio network controller a variable loading limit to be applied.